

Claims

1. A gas generator comprising  
an elongated outer housing (10) that has end faces and a side wall,  
at least three stages (12, 14, 16; 112, 114, 116, 118) which can be activated  
5 independently of each other, and  
for each stage (12, 14, 16; 112, 114, 116, 118) an associated igniter unit (32, 34,  
36; 132, 134, 136, 138),  
said igniter units (32, 34, 36; 132, 134, 136, 138) being mounted laterally to said  
side wall of said outer housing (10).
- 10 2. The gas generator according to Claim 1, characterized in that said igniter  
units (32, 34, 36; 132, 134, 136, 138) are provided so as to extend radially from  
said outer housing (10).
3. The gas generator according to Claim 1, characterized in that said igniter  
units (32, 34, 36; 132, 134, 136, 138) are identical in construction.
- 15 4. The gas generator according to Claim 1, characterized in that said igniter  
units (32, 34, 36; 132, 134, 136, 138) all have an identical orientation with respect  
to said outer housing.
5. The gas generator according to Claim 1, characterized in that each igniter  
unit (32, 34, 36; 132, 134, 136, 138) has rear, electrical contacts (48) facing away  
20 from said outer housing (10).
6. The gas generator according to Claim 1, characterized in that said outer  
housing (10) has a passage opening (52) for each igniter unit (32, 34, 36; 132,  
134, 136, 138) and outlet openings (64) for generated gas for each stage (12, 14,  
16; 112, 114, 116, 118), said passage opening (52) and said outlet openings (64)  
25 being arranged in diametrically opposite regions of said outer housing (10).

7. The gas generator according to Claim 1, characterized in that said stages (12, 14, 16; 112, 114, 116, 118) are formed by associated combustion chambers (22, 24, 26; 122, 124, 126, 128) filled with solid propellant (40).

5 8. The gas generator according to Claim 1, characterized in that said outer housing (10) is modular in construction, by at least one stage (14, 114, 116), lying between axially outer stages, having an outer housing section formed by a tubular part.

9. The gas generator according to Claim 8, characterized in that disc-shaped, axial dividing walls (80) are provided between said outer housing sections.

10 10. The gas generator according to Claim 9, characterized in that all said axial dividing walls (80) have the same geometry and dimensions.

11. The gas generator according to Claim 1, characterized in that it has three stages (12, 14, 16), a gas generating output of which amounts to approximately  $1/7$ ,  $2/7$  and  $4/7$  of a total gas generating output of said gas generator.

15 12. The gas generator according to Claims 1, characterized in that it has four stages (112, 114, 116, 118), a gas generating output of which amounts to approximately 7%, 13%, 27% and 53% of a total gas generating output of said gas generator.

20 13. The gas generator according to Claim 1, characterized in that at least two stages (12, 14, 16; 112, 114, 116, 118) have at least one of different gas generating outputs, solid propellant (40) of different geometry and different charge mixtures.

25 14. The gas generator according to Claim 1, characterized in that said igniter units have igniter housings (42) which, viewed transversely to a longitudinal extent of said gas generator, are arranged asymmetrically to said outer housing (10).

15. The gas generator according to Claim 1, characterized in that said igniter units have igniter housings (42) which, viewed transversely to a longitudinal extent of said gas generator, are arranged asymmetrically to each other.

5 16. The gas generator according to Claim 1, characterized in that said igniter have associated igniter housings (42) which are constructed as fastening means for arresting said gas generator in a module.